

## ***Recording***

AR-04-1189

## **Recording options**

This section is an overview of the types of recording available from the Audio Event Editor. When you know what type of recording you want to do, go directly to the section that describes that option in detail.

### **Selecting a recording option**

**Continuous recording** records Direct-to-Disk tracks in sync with each other, like a multitrack tape recorder. **Cue recording** lets you record multiple takes, one after another, that can be assembled into an edit decision list.

With either type of recording, you can trigger the recording manually or set automatic start and stop times that correlate with the **sequencer**, the internal device that provides the timing used to sync Direct-to-disk recordings to film or video.

In addition to live cue recording, you can record the current sound file in the Sound File Editor or the optical disk as a cue. You can also re-record a cue and retain its sync time or compressing or expanding its length.

Most recording is done using the Record Control and Sequencer Motion Control panels of the Audio Event Editor. The type of recording you do is primarily controlled by the **Mode** and **Trig** switches on the left side of the Record Control panel. The table on the opposite page gives a summary of the different types of recording with their Mode and Trig switch settings and the section of the manual where you will find instructions.

## *Direct-to-Disk recording options*

Mode	Trigger	Type of recording	Manual section
Punch In	Manual	Continuous recording triggered manually.	"Continuous recording"
Punch In	Sequencer	Continuous recording triggered automatically from preset sequencer start and stop times.	"Continuous recording"
Allocate	Manual	Cue recording triggered manually.	"Cue recording"
Allocate	Sequencer	Cue recording triggered automatically from preset sequencer start and stop times.	"Cue recording"
Allocate	PolyXfer	Cue recording from current sound file in Sound File Editor.	"Recording sound files from poly memory."
Allocate	TSM	Cue compression or expansion	"Cue recording"
Cue Lock	Manual	Recording over a cue manually.	"Cue recording"
Cue Lock	Sequencer	Recording over a cue automatically.	"Cue recording"
Cue Lock	PolyXfer	Recording over a cue with the current sound file in the Sound File Editor.	"Recording sound files from poly memory"
*	*	Cue recording from an optical disk	"Recording sound files from optical disk."

\* Use the Optical Transfer panel of the Audio Event Editor.

## ***Continuous recording***

When doing continuous recording, the Direct-to-Disk acts like a multi-track tape recorder with the tracks synchronized to each other.

## ***Manual punch in***

Continuous recording on the Direct-to-Disk is done using the **Punch In** mode on the Record Control panel. Manual Punch In is used to record in real time at any location on the track. The Record panel and the Sequencer Motion Control panel should be displayed.

1. Set the mode and trigger settings in the Record panel.

Mode **Punch In**  
Trig **Manual**

2. If you have not done so already, arm the track on which you want to record by clicking the desired Track number below the trigger settings.
3. Click the **READY** button.
4. Click the **RECORD** button.

The **RECORD** button lights, but recording does not begin.

5. Click the **START** button on the Sequencer Motion Control panel when you want to start recording.

The sequencer starts, and recording begins.

6. Click the **STOP** button when you want to stop recording.
7. Click the **STOP** button on the Sequencer Motion Control panel to stop the sequencer.

## *Auto punch in times*

Auto punch in is done using the trigger setting Sequencer. When Sequencer is selected, two sets of times appear on the right side of the Record Control panel.

The Trig Start and Trig Stop times refer to the sequencer times at which recording is triggered to start and stop. This may be picture time. You can change either by using the trigger Take buttons or by entering a new time.

The Trk Start and Trk Stop times indicate at what location on the Direct-to-Disk tracks you are going to record.

If there is no SMPTE offset, then the Trk times and the Trig times are the same. If there is an offset, then the amount of the offset is reflected in the Trig times.

<input checked="" type="checkbox"/> Trig Start	00:00:00.00
<input checked="" type="checkbox"/> Trig Stop	00:00:00.00

Trk Start	00:00:00.00
Trk Stop	00:00:00.00

## **Continuous recording (con't)**

### ***Auto punch in***

Auto punch in allows you to trigger recording automatically at preset start and stop times. The Record panel and the Sequencer Motion Control panel should be displayed.

1. Set the mode and trigger settings in the Record panel.

Mode	Punch In
Trig	Sequencer

2. If you want to change the trigger times (the sequencer times at which recording begins and ends) enter those times into the Trig Start and Trig Stop fields.
3. If you have not done so already, arm the track on which you want to record by clicking the desired Track number.
4. Click the READY button.
5. Click the RECORD button.

The RECORD button lights, but recording does not begin.

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### *Auto punch-in (con't)*

6. Click the **START** button on the Sequencer Motion Control panel.

If there is a current sequence, it begins playing. When the Trig Start time is reached, recording begins automatically.

7. You can temporarily stop and start recording by clicking the **RECORD** button. The tracks remain synchronized, and the sequencer continues to advance.

When the Trig Stop time is reached, recording stops automatically.

8. Click the **STOP** button on the Sequencer Motion Control panel to stop the sequencer.

## **Continuous recording (con't)**

### ***Rehearsing a take***

When Sequencer is selected as your trigger for recording, you can rehearse a take before actually recording it.

1. Set the mode and trigger switches in the Record panel.

Mode	Punch In
Trig	Sequencer

2. If you want to change the trigger times (the sequencer times at which recording begins and ends) enter those times into the Trig Start and Trig Stop fields.
3. If you have not done so already, arm the track on which you want to record by clicking the desired track number.
4. Click the REHEARSE button.
5. Click the START button on the Sequencer Motion Control panel.

At the Trig Start time, the armed track is silent and inputs are turned on. At the Trig Stop time, inputs are turned off and normal playback resumes. No recording takes place.

6. Click the STOP button on the Sequencer Motion Control panel to stop playback.



## *Digital crossfades*

You can crossfade from one part of a continuous recording to another during punch in by setting a **crossfade** amount. This digital crossfade is performed on the track, allowing a smooth transition between parts of a recording.

The crossfade time is displayed at the bottom of the Record Control panel as **Cfade**. The minimum allowable crossfade time is 0 msec. The maximum crossfade time is 65,535 msec (65.535 seconds).

- Select the Cfade field and type a crossfade time.

The time is entered in milliseconds. When you punch into a track during recording, this is the length of the crossfade performed.

## ***Cue recording***

Cue recording allows you to record tracks independently. Multiple takes can be recorded consecutively and assembled later in any order. No recording space is wasted.

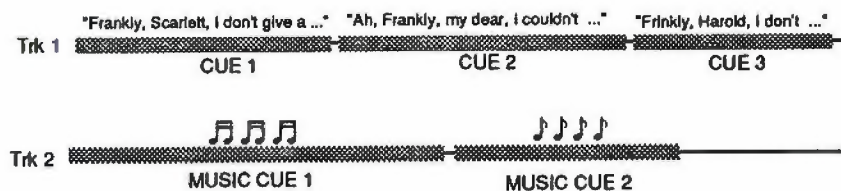
## ***Cues***

A cue is a designated area of recording on the Direct-to-Disk tracks. When recording cues, you not only record onto a track, but you also keep a record of where a specific recording is located, so that it can be recalled for editing and playback later on. Cues are like a transparent map which locates a recording on the tracks. Random access technology allows you to recall these cues instantly, without having to wait for a tape to fast forward or rewind.

Like a piece of tape, a cue can be edited, synced to picture and triggered by time code. But unlike tape, when you edit cues, you do not alter your original recording.

For a complete discussion of editing cues, see the manual *Audio Editing*.

*Each take as a cue*



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## Cue recording (con't)

### *Naming a cue*

Each cue has a name, either one you assign to it or one assigned by default. The cue is saved under this name after recording. The name of the next cue to be recorded appears in the Cue name field below the STOP button.

The default cue name is Take 01. You cannot use the same cue name twice. You can, however, increment the cue name automatically as you record (e.g. Take 01, Take 02, Take 03, etc.). This protects you from accidentally overwriting a cue.\*

You can assign a name of your choice to a cue before recording.

1. Click on the Cue field at the bottom left of the Record panel.
2. Type the new cue name and press Return.

This is the name of the *next* cue you record.

\* If you attempt to use the same name again, a message will ask you to select another name. At this time, you could choose to keep the same name but add a number suffix to it. From then on, the cue name will increment automatically.

## *Recording in Allocate mode*

Cue recording on the Direct-to-Disk is done using the **Allocate Mode** on the Record Control panel. You can record manually or you can automatically trigger recording at a preset time.

If you are recording automatically (Sequencer trigger), the Trig Start and Trig Stop times refer to the sequencer times that trigger recording. This may be picture time. Trigger times can be set using the trigger Take button or by typing a new time.

Trk Start and Trk Stop reflect the location on the Direct-to-Disk track at which recording takes place. The Trk Start time is always set to the beginning of an empty track or the end of the last recorded material on a track. The Trk Stop time is always set to the end of the track.

When doing cue recording, each take is saved as a new cue. The name of the cue you are about to make appears below the STOP button.

## **Cue recording (con't)**

### **Recording a cue**

A cue can be as long as the entire recorded track or it can be as short as a single, brief effect, like a footstep.

1. Set the mode and trigger switches in the Record panel.

Mode	Allocate
Trig	Manual

2. If you have not done so already, arm the track on which you want to record by clicking the desired Track number below the trigger settings.
3. Click the READY button.
4. Click the RECORD button.

The RECORD button lights and changes to BLOCK. Recording begins immediately.

If you want to create one cue, go to Step 6.

OR

If you want to create more than one cue, go to Step 5.

*(continued next page)*

## *Recording a cue (con't)*

5. Click the BLOCK button each time you want to save a cue.

With each click of the BLOCK button, a new cue is named and saved. The BLOCK button determines the *end* of each cue.\*

6. Click the STOP button when you want to stop recording.

Recording stops. One or more cues of the material you just recorded is saved and can be played back by clicking on the name in the Cue Directory.

\* When you are blocking cues, a cue is not created until you click the BLOCK button. If you want to block all recorded material on the track into cues, make sure you don't forget to block the tail end of the recording by clicking the BLOCK button before clicking the STOP button.

## ***Cue recording (con't)***

### ***Doing a retake***

If you want to erase the last take, use the **Retake** button. Retake only works in the **Allocate** mode.

1. Click the **Retake** button at the bottom of the **Record** panel.
2. Click **[RETAKE]** in the dialog.

The cue is erased.

If you continue to press the **Retake** button you can erase cues back to the very beginning of the track.

You can also retake a cue in the middle of a track by recalling the cue and using the **Retake** button. The recording at the cue location on the selected track is erased.



## *Recording over a cue*

A track that has been recorded in Allocate mode is made up of cues. You can record over any of these cues. The Record Control and the Cue Directory panels should be displayed.

1. In the Cue Directory, click the name of the cue that you want to record over.

The name of the current cue appears in the Cue name field.

2. Set the mode and trigger switches in the Record panel.

Mode	Cue Lock
Trig	Manual

The Trk Start and Trk Stop times become Cue Start and Cue Stop times.\*

3. Arm the track on which you want to record by clicking the desired Track number below the trigger settings.
4. Click the READY button.
5. Click the RECORD button.

Recording begins on the track at the Cue Start time. Recording stops automatically when the Cue Stop time is reached.

\*Recording takes place from the IN to the OUT time of the cue on the track. If you only want to punch in over a portion of the cue, reset the IN and OUT times using the Cue Editor panel. See more information, see the manual *Audio Editing*.

## ***Cue recording (con't)***

### ***Auto allocate***

In Auto allocate, recording is triggered automatically. Since the trigger start time is the sync time saved with the cue, this is a useful way to record cues automatically synced to picture. The Record Control and the Sequencer Motion Control panels should be displayed.

1. Set the mode and trigger settings in the Record panel.

Mode	Allocate
Trig	Sequencer

2. If you have not done so already, arm the track on which you want to record by clicking the desired Track number.
3. Click the READY button.
4. Click the RECORD button.

Recording does not begin until the next step.

5. Click the START button on the Sequencer Motion Control panel.

Recording starts automatically at the Trig Start time.

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### *Auto allocate (con't)*

6. If you want to block the recording into more than one cue, click the BLOCK button when you want to create a new cue.
7. When the Trig Stop time is reached, recording stops.
8. Click the STOP button on the Sequencer Motion Control panel to stop the sequencer.

## **Cue recording (con't)**

### ***Recording over a synchronized cue***

You can automatically record over a cue and retain its original sync time. The Record Control, Cue Directory and the Sequencer Motion Control panels should be displayed.

1. In the Cue Directory, click the name of the cue that you want to record over.

The cue name appears in the Cue name field in the Record panel.

2. Set the mode and trigger switches in the Record panel.

Mode	Cue Lock
Trig	Sequencer

Trk Start and Stop times become Cue Start and Stop times. The sync time of the cue is the same as the Cue Start time.\*

3. Arm the track on which you want to record by clicking the desired Track number.
4. Click the READY button.

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\*Recording takes place from the IN to the OUT time of the cue on the track. If you only want to punch over a portion of the cue, reset the IN and OUT times, using the Cue Editor panel. For more information, see the manual *Audio Editing*.

## *Recording over a synchronized cue (con't)*

5. Click the RECORD button.

The RECORD button lights, but recording does not begin.

6. Click the START button on the Sequencer Motion Control panel.

The sequencer begins. Recording starts when the Cue Start time is reached.

Recording stops when the Cue Stop time is reached.

7. Click the STOP button on the Sequencer Motion Control panel to stop the sequencer.

## ***Recording sound files from poly memory***

If you have a Synclavier with polyphonic sampling, you can record a sound file onto the Direct-to-Disk from poly memory or the optical disk. The sound file is always recorded as a cue.

(For information on saving a cue as a sound file, see the *Audio Editing* manual.)

## ***Recording a sound file***

You can transfer the current sound file to the Direct-to-Disk using the Sound File Editor and the Record Control and Cue Directory panels of the Audio Event Editor.

1. Recall a sound file to the Sound File Editor.
2. Set the mode and trigger switches in the Record panel.

Mode	Allocate
Trig	PolyXfr

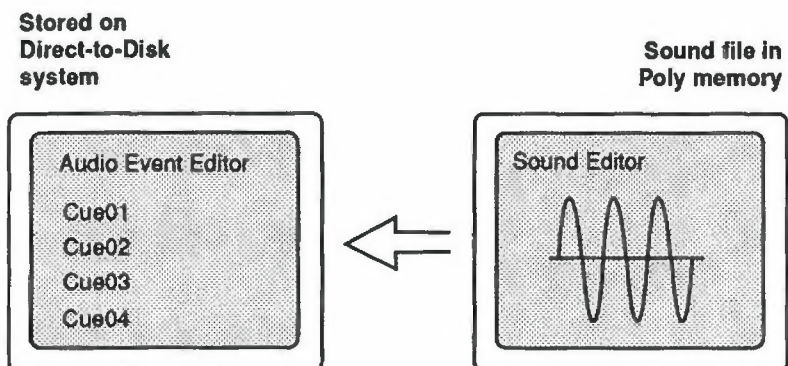
3. Arm the track on which you want to record by clicking the desired Track number.
4. Click the READY button.

The name of the sound file appears in the Cue name field.

5. Click the RECORD button.
6. Click [TRANSFER] in the dialog to begin recording.

At the end of the transfer a cue is saved under the first eight letters of the sound file name.

*Recording a sound  
file from poly  
memory*



## **Recording sound files from poly memory (con't)**

### ***Recording over a cue***

You can record a sound file to a specific cue location using the Sound File Editor and the Cue Directory and Record Control panels of the Audio Event Editor.

1. Recall a sound file to the Sound File Editor.
2. Set the mode and trigger setting in the Record panel.

Mode	Cue Lock
Trig	PolyXfr
3. In the Cue Directory, click the cue you want to record over.
4. Arm the track on which you want to record by clicking the desired Track number.
5. Click the READY button.
6. Click the RECORD button.

If the sound file is shorter than the cue, the following dialog appears.

Transfer "filename" to DTD:

[COMPUTE END][FILL TO END] [TRANSFER][CANCEL]

If the sound file is longer than the cue, the following dialog appears.

Transfer "filename" to DTD:

[COMPUTE END][EXTRACT] [TRANSFER][CANCEL]

*(continued next page)*



## *Recording over a cue (con't)*

7. Click the desired method for fitting the sound file into the cue length.

[COMPUTE END] expands or contracts the cue length to equal the length of the sound file.

**Note:** If the sound file is longer than the cue and the cue is sandwiched in between two other cues, the cue cannot be made longer. The cue can be made longer if it is the last recorded take and there is room available on the track.

[FILL TO END] transfers a short sound file and then fills the remaining cue space with leader.

[EXTRACT] transfers only as much of a long sound file as will fill the cue.

The Cue Start and Stop times may be recalculated under some of these circumstances.

8. Click [TRANSFER].

Recording begins at the Cue Start time. When the Cue Stop time is reached, recording stops.

## ***Recording sound files from the optical disk***

You can record a sound file from an optical disk onto the Direct-to-Disk. The sound file becomes a cue and appears in the Cue Directory.

(See "Optical disk" in the *Organizing and Storing Sounds* manual for more information about optical disk storage.)

## ***Setting up to copy a sound file***

A sound file copied from an optical disk onto the Direct-to-Disk becomes a cue in the current project. The sample rate of the sound file is converted to the sample rate of the project.

A sound file is copied from the optical disk using the Audio Event Editor's Optical Transfer panel.

1. Click OPT XFER in the Audio Event Editor Selection panel.

If an optical disk volume has been loaded, the name of the current volume appears at the top of the panel and its sound files are listed in the middle of the panel. Use the scroll bar at the right to scroll through the sound file names.

2. Click LOAD VOL on the Optical Transfer panel.
4. If the index is not up-to-date, click [UPDATE] in the dialog or [CANCEL] to cancel the operation.

## *The Optical Transfer panel*

OPTICAL TRANSFER

Contents of Volume SOUNDEFX0001

A T ? F

ANIMALS:MAMMALS:

ANIM0001 ANIM0002 ANIM0003 ANIM0004 ANIM0005 ANIM0006 ANIM0007 ANIM0008  
ANIM0009 ANIM0010 ANIM0011 ANIM0012 ANIM0013 ANIM0014 ANIM0015 ANIM0016

ANIMALS:FISH:

FISH0001 FISH0002 FISH0003 FISH0004 FISH0005 FISH0006 FISH0007 FISH0008  
FISH0009 FISH0010 FISH0011 FISH0012

ANIMALS:HUMANS:

LOAD VOL DISPLAY COPY RETAKE PLACE on 1 at 0.000 Audit

## ***Recording sound files from the optical disk (con't)***

### ***Displaying sound file information***

You can display the catalogs and files on the optical disk in several ways.

1. Click DISPLAY at the bottom of the panel.

The following dialog appears.

No. of rows: 8   Show: [CAPTION] [SECONDS]  
Sort: by Files Only   [DONE]

2. Enter the number or rows of sound files you want displayed.
3. Click [CAPTION] and/or [SECONDS] to display sound file caption and length in seconds.
4. Step the Sort dialog to display categories, files or both.
5. Click [DONE] or anywhere on the screen to hide the dialog.

## *Auditioning a sound file*

You can audition a sound file without copying it to the Direct-to-Disk. The cue is auditioned through poly memory or Direct-to-Disk memory, depending on the type of system.

1. Click the "A" button at the top right of the panel.

2. Select a sound file.

The sound file plays.

3. Click anywhere on the screen to stop auditioning.

4. Click the "A" button again to turn off the audition function.

## ***Recording sound files from the optical disk (con't)***

### ***Recording a sound file to the Direct-to-Disk***

When you record a sound file to the Direct-to-Disk, the system automatically records in Allocate mode, creating a cue.

1. Select a sound file to copy to the Direct-to-Disk.
2. Click the COPY button at the bottom of the panel.

The track numbers in the dialog default to 1 for mono sound files and 1 and 2 for stereo sound files. The cue name defaults to the sound file name.

3. Enter the appropriate track number(s) and cue name, if different.

Selected tracks are armed during the copy operation; all other tracks are disarmed.

4. Click [COPY] in the dialog.

The sound file is recorded as a cue at the end of the recorded material on the track, or for a stereo sound file, at the end of the recorded material on both tracks. The cue is saved and appears in the Cue Directory. The track is returned to its previous mode.

5. If you want to abort the transfer, press Control-Spacebar.

The audio transferred so far is saved as a cue under the designated name.

## *Playing and retaking the cue*

You can play the current cue just copied to the Direct-to-Disk using the play and stop buttons at the bottom of the Optical Disk panel.

- Click the play button (▶) to play the cue from the beginning.
- Click the stop button (■) to stop cue playback.

You can erase the previous transfer.

1. When retaking a mono cue, arm the track on which the cue is located.

OR

When retaking a stereo cue, arm both tracks on which the cue is located.

2. Click the RETAKE button.
3. Click [RETAKE] in the dialog.

The previously recorded cue is erased.

## ***Time scale modification***

You can compress or expand the duration of a cue without changing its pitch by re-recording it to the Direct-to-Disk. The length of the modified cue can be between half and twice the length of the original cue.

## ***Introduction***

You modify the time scale of a cue by selecting one of two settings for the switch labeled "Alg" on the Record Control panel of the Audio Event Editor.

- Use ONE for most speech or solo instruments or for cues containing percussion.
- Use TWO for most music or sound effects or for stereo cues with substantially different tracks.
- Use THREE for mixed music or stereo cues.

You can specify the desired length of the cue, or you can specify the ratio of compression or expansion. If you specify a length, the ratio value automatically changes to reflect the new length. If you specify a ratio, the length value automatically changes to reflect the new ratio.

When you modify the time scale of the current cue, it is internally re-recorded onto the Direct-to-Disk track you select. The original cue remains intact. If the current cue is a stereo cue, the new cue is also a stereo cue. If the current cue is a mono cue, the new cue is also a mono cue.



## The Record Control panel

ONE setting

TWO setting

THREE setting

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### RECORD CONTROL

READY	Mode	Allocate	Trk Start	00:00:00:00.00	Take 02	Alg: ONE
PROCESS	Trig	TSM	Trk Stop	00:00:00:00.00	New cue length:	00:00:02:00.00
STOP	Rec	Single	Tracks 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16			
Cue: Take 03			Retake		Clade: 5	Options
Max cut (MS): 20.48			Justification: 4		[ OK ]	

### RECORD CONTROL

READY	Mode	Allocate	Trk Start	00:00:00:00.00	Take 02	Alg: TWO
PROCESS	Trig	TSM	Trk Stop	00:00:00:00.00	New cue length:	00:00:02:00.00
STOP	Rec	Single	Tracks 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16			
Cue: Take 03			Retake		Clade: 5	

### RECORD CONTROL

READY	Mode	Allocate	Trk Start	00:00:00:00.00	Take 02	Alg: THREE
PROCESS	Trig	TSM	Trk Stop	00:00:00:00.00	New cue length:	00:00:02:00.00
STOP	Rec	Single	Tracks 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16			
Cue: Take 03			Retake		Clade: 5	Options

## ***Time scale modification (con't)***

### ***Modifying the time scale of a cue***

1. Select the following mode and trigger settings on the Record Control panel.

Mode	Allocate
Trig	TSM

2. Set the switch labeled "Alg" to either ONE, TWO or THREE.
3. Click the small L below the scroll arrows if you plan to enter a new cue length, or click the small R if you plan to enter a modification ratio.
4. Change the value in the field labeled "New cue length" to specify the desired length of the cue in seconds, or change the value in the field labeled "Ratio" to specify the desired ratio of compression or expansion.
5. If you selected ONE click the Options command, enter the desired value into each numeric field in the dialog bar and click [OK].
6. Select the desired destination track(s).
7. If desired, enter a new name in the field labeled Cue at the bottom left of the Record Control panel. It is the name of the cue you are about to record.
8. Click the READY button.
9. Click PROCESS to start the procedure, or press Command-Spacebar to interrupt the procedure and save a cue of the portion processed to that point.

## *Recording options*

### *ONE*

The length of the current cue is the default value shown in the field labeled "New cue length." You can enter any other value between four-fifths and six-fifths the length of the current cue.

The default ratio is 1.0000. You can enter any other value between 0.8000 and 1.2000 in the field labeled "Ratio."

ONE separates the cue into regular intervals, and cuts (for compression) or loops (for expansion) at least one segment of the cue within each interval.

The value in the field labeled "Max cut" indicates in milliseconds the longest segment that can be cut or looped from each interval. You can enter any value between 5.12 and 40.96.

The value in the field labeled "Justification" indicates the relative size of the intervals. You can set the Justification value to 1, 2, 3 or 4. A value of 4 separates the cue into the longest possible intervals is appropriate for most cues, except those that are clearly rhythmic. We recommend that you first modify the time scale with the Justification set at 4, and listen to the result.

### *TWO and THREE*

The length of the current cue is the default value shown in the field labeled "New cue length." You can enter any other value between half and twice the length of the current cue. The default ratio is 1.0000. You can enter any other value between 0.5001 and 1.9999 in the field labeled "Ratio."

## ***Bouncing Direct-to-Disk tracks***

You can bounce Direct-to-Disk tracks onto other tracks of the Direct-to-Disk using the Track Display or the Audio Event Editor.

Before attempting to use the bounce feature, make sure you are familiar with the section "Track routing" in the *Studio Operations* manual and the section "Preparing to Record" in this manual.

## ***Bouncing tracks***

You can bounce recorded material from one Direct-to-Disk track to another. Up to two tracks can be bounced at a time.

When bouncing tracks, the bounced audio remains in the digital domain and retains its original recorded quality. There is no delay recording to the track when bouncing audio. (There will be a delay hearing the output if you record and bounce at the same time.)

The bounce mechanism can be turned off and on. When bounce is turned off, bounce routings are ignored.

You use the Show Project mode of the Project Manager to set up for a track bounce.

*The Project Manager panel in Show Project mode*

PROJECT MANAGER												
Proj 1. Commercial 7/11/88		Start 0:00		End 6:23		Rate 50.0		Unlocked		M		
No.	Track Title	Status	Mode	Used	Input	dB	Out	No.	Vol	Pan	DDT	
1.	Announcer 1	Safe	Auto	5:00	STM 1A	1.0	1	1	100.0	-50	2	
2.	Announcer 2	Safe	Auto	4:23	STM 1B	1.0	2	2	100.0	+50		
3.	Announcer 3	Safe	Auto	4:10	OUT	2	1.0	3	100.0	-50		
4.	Music Intro	Safe	Auto	1:23	TRK	3	1.0	4	100.0	+50		
5.	Music 1	Ready	Auto	1:23	DIG	1	1.0	5	100.0	-50		
6.	Music 2	Safe	Auto	0:45	STM	1	0.6	6	100.0	+50		
7.	Music Finale	Safe	Auto	1:54	STM	1.0	7	7	100.0	-50		
8.							8	8				
Show All ALL: Repro : Input : Auto : Cue PB : Safe Lock Unlock Erase Size: 8												

## ***Bouncing Direct-to-Disk tracks (con't)***

### ***Setting up to bounce***

You bounce tracks using the Project Manager, the Record Control and the Sequencer Motion Control panels.

1. Click the Digital Transfer BOUNCE button in the Selection panel to turn on digital bounce.
2. Display the Project Manager, the Sequencer Motion Control and the Record Control panels.
3. Display the Project Manager panel in the Show Project mode.
4. Set the following parameters for the source and destination tracks.

	Status	Mode	Input
Source	Safe	Repro	
Destination	Ready	Input	TRK 1-16

6. Set the Record Control panel's Mode and Trigger switches for the type of recording you want to do. (For more information on setting the switches see "Recording options.")

## ***Bouncing tracks***

You are now ready to start the digital bounce.

1. Click READY on the Record Control panel.
2. Click RECORD on the Record Control panel.

Recording begins if you are set to Manual Mode in the Record Control panel. If you are set to Sequencer Mode, recording does not begin until the next step.

3. Click START on the Sequencer Motion Control panel when you want to start the bounce.

The track plays back while it is being bounced.

4. Click STOP on the Record Control panel when you want to stop recording.
5. Click STOP on the Sequencer Motion Control panel when you want to stop the bounce.
6. Click Digital Transfer OFF in the Selection panel to turn off digital bounce.

## ***Protecting projects and tracks***

You can lock an entire project or individual tracks to guard against accidental erasure. When a project or track is locked, you cannot record on it or change its parameters.

## ***Locking a project***

The lock status of a project is shown at the top of the Show All mode of the Project Manager as **Stat**.

1. Display the Project Manager panel in the Show All mode.
2. Click the **Change Lock** command at the bottom of the panel.

All locked projects are highlighted.

3. Click in the tracks area of any project whose status you want to change.

The selected project(s) is highlighted.

4. Click [OK] in the dialog.

**Note:** You cannot lock a project that has no recorded material in it.



## *Locking a track*

The lock status of a track is shown in the Status column of the Project Manager in Show Project mode.

1. Display the Project Manager panel in Show Project mode.
2. Click the LOCK or UNLOCK command at the bottom of the panel.
3. Click on the track you want to lock or unlock.
4. Click [OK] in the dialog.